## **CLAIMS**

- 1. An agent for inhibiting decrease in measured values in immunoassays, caused by an interfering substance(s), which agent is an ionic surfactant having a molecular weight of 1000 to 100,000, said ionic surfactant being a polymer in which a hydrophobic cyclic monomer(s) having an ionic functional group(s) is(are) polymerized.
- 2. The agent for inhibiting decrease in measured values in immunoassays according to claim 1, wherein said polymer comprises a recurring unit represented by the following Formula [I]:

$$\begin{array}{c|c}
R^{1} & R^{2} \\
C & C \\
C & C \\
Ar & R^{3} \\
X
\end{array}$$

10 [I]

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wherein Ar represents a hydrophobic ring; X represents the ionic functional group;  $R^1$  to  $R^3$  independently represent hydrogen or alkyl; n represents an integer of 0 to 10; hydrogen atom(s) bound to a carbon atom(s) constituting Ar optionally being substituted with a substituent(s) which does(do) not adversely affect the effect of the present invention.

- 3. The agent for inhibiting decrease in measured values in immunoassays according to claim 1 or 2, wherein said hydrophobic cyclic monomer is an aromatic monomer.
- 4. The agent for inhibiting decrease in measured values in immunoassays according to claim 3, wherein said aromatic monomer has a benzene ring.
  - 5. The agent for inhibiting decrease in measured values in immunoassays according to any one of claim 1 to 4, wherein said ionic functional group is sulfonic group or a salt thereof, carboxylic group or a salt thereof, or an amine.

- 6. The agent for inhibiting decrease in measured values in immunoassays according to claim 5, wherein said ionic functional group is sulfonic group or a salt thereof.
- 7. The agent for inhibiting decrease in measured values in immunoassays according to claim 2, wherein said recurring unit is represented by the following Formula [II]:

$$\begin{array}{c|c}
R^1 & R^2 \\
\hline
C & C \\
\hline
R^3 \\
\hline
R^5 & R^6
\end{array}$$
[II]

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wherein M represents an atom or a group which becomes a monovalent cation in aqueous solution;  $R^1$  to  $R^3$  have the same meanings as said  $R^1$  to  $R^3$  in said Formula [I]; and  $R^4$  to  $R^6$  independently represent hydrogen, lower alkoxyl or lower alkyl.

- 8. The agent for inhibiting decrease in measured values in immunoassays according to claim 5, wherein said recurring unit is an anethole sulfonic acid salt or styrene sulfonic acid salt.
- 9. The agent for inhibiting decrease in measured values in immunoassays according to any one of claims 1 to 9, wherein said immunoassay is an immunoagglutination method.
  - 10. An immunoassay which is carried out in the presence of said agent for inhibiting decrease in measured values in immunoassays according to any one of claims 1 to 9.
- 20 11. The immunoassay according to claim 10, comprising a first step of bringing a test sample into contact with said agent for inhibiting decrease in measured values in

immunoassays; and a second step of subjecting said test sample to antigen-antibody reaction with sensitized particles or with an antiserum.

- 12. The immunoassay according to claim 10 or 11, wherein said test sample is a biological sample.
- The immunoassay according to claim 12, wherein said test sample is blood, serum or blood plasma.
  - 14. The immunoassay according to any one of claims 10 to 13, wherein the concentration of said agent for inhibiting decrease in measured values in immunoassays in reaction solution is 0.01% to 5% (weight/volume).
- 10 15. The immunoassay according to any one of claims 10 to 14, which is an immunoagglutination method.

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- 16. A reagent for immunoassays comprising at least a buffer and sensitized particles or an antiserum, characterized by further comprising said agent for inhibiting decrease in measured values in immunoassays according to any one of claims 1 to 9.
- 17. The reagent according to claim 14, which is a binary liquid reagent comprising a first reagent including at least a buffer, said first reagent being firstly mixed with a test sample; and a second reagent including at least a buffer and said sensitized particles, said second reagent being added to the mixture of said test sample and said first reagent.
- 18. The reagent according to claim 16 or 17, wherein said immunoassay is immunoagglutination method.
- 19. Use of said ionic surfactant recited in any one of claims 1 to 9 as an agent for inhibiting decrease in measured values in immunoassays.
- 25 20. A method for inhibiting decrease in measured values in immunoassays, which method comprises making said ionic surfactant recited in any one of claims 1 to 9 coexist in reaction solution of said immunoassay.